Abstract of the disclosure

The invention provides modified recombinant nucleic acid sequences (preferably DNA) and methods for increasing the mRNA levels and protein expression of malarial surface protein MSP-1 which is known to be difficult to express in cell culture systems, mammalian cell culture systems, or in transgenic animals. The preferred protein candidates for expression using the recombinant techniques of the invention are MSP-1 proteins expressed from DNA coding sequences comprising reduced overall AT content or AT rich regions and/or mRNA instability motifs and/or rare codons relative to the native MSP-1 gene.